

**MINUTES
of the
FIFTH MEETING
of the
WATER AND NATURAL RESOURCES COMMITTEE**

**December 2-3, 2014
Room 322, State Capitol
Santa Fe**

The fifth meeting of the Water and Natural Resources Committee was called to order on Tuesday, December 2, 2014, at 9:05 a.m. by Representative George Dodge, Jr., chair, in Room 322 of the State Capitol in Santa Fe.

Present

Rep. George Dodge, Jr., Chair
Sen. Phil A. Griego, Vice Chair
Rep. Paul C. Bandy (Dec. 2)
Sen. Joseph Cervantes
Sen. Cliff R. Pirtle
Sen. Sander Rue
Sen. Benny Shendo, Jr. (Dec. 2)
Rep. Mimi Stewart
Rep. Don L. Tripp
Sen. Peter Wirth
Sen. Pat Woods

Advisory Members

Sen. Carlos R. Cisneros
Rep. Sharon Clahchischilliage
Sen. Lee S. Cotter
Rep. Nora Espinoza (Dec. 2)
Rep. Candy Spence Ezzell
Sen. Ron Griggs
Sen. Stuart Ingle (Dec. 2)
Sen. Gay G. Kernan (Dec. 2)
Rep. James Roger Madalena (Dec. 2)
Sen. Cisco McSorley
Sen. Gerald Ortiz y Pino (Dec. 2)
Sen. Mary Kay Papen (Dec. 2)
Sen. Nancy Rodriguez (Dec. 3)
Rep. Tomás E. Salazar
Sen. John Arthur Smith
Rep. Jeff Steinborn

Absent

Rep. Phillip M. Archuleta
Rep. Brian Egolf
Rep. William "Bill" J. Gray
Rep. Dona G. Irwin
Rep. Emily Kane
Rep. Larry A. Larrañaga
Sen. George K. Munoz
Rep. James R.J. Strickler

Rep. Cathrynn N. Brown
Sen. Pete Campos
Rep. Gail Chasey
Rep. Anna M. Crook
Rep. Rodolpho "Rudy" S. Martinez
Rep. W. Ken Martinez
Sen. Steven P. Neville
Rep. Vickie Perea
Sen. John C. Ryan
Rep. Henry Kiki Saavedra
Sen. William E. Sharer
Rep. Bob Wooley

Guest Legislators

Sen. Linda M. Lopez (Dec. 2)

Rep. Debbie A. Rodella (Dec. 2)

(Attendance dates are noted for those members not present for the entire meeting.)

Staff

Jon Boller, Legislative Council Service (LCS)

Jeret Fleetwood, LCS

Gordon Meeks, LCS

Guests

The guest list is in the original meeting file.

Minutes Approval

Because the committee will not meet again this year, the minutes for this meeting have not been officially adopted by the committee.

Handouts

Handouts and other written testimony can be found in the meeting file or on the New Mexico Legislature's web site at www.nmlegis.gov.

Tuesday, December 2**Plains of San Agustin Water Appropriation Proposal**

Eileen Dodds of the San Augustin Water Coalition began by explaining that an application to appropriate and export 54,000 acre-feet of water from the Plains of San Agustin had been rejected by the Office of the State Engineer (OSE), but the applicant, San Augustin Plains Ranch, has now filed a second application. She noted that the second application was more polished than the first one but emphasized that the concerns are the same for area well owners and water users: drilling numerous, deep wells in the area will be a detriment to everyone else in the basin. Ms. Dodds said that while some proponents of the project argue that the basin will not be depleted for at least 300 years, there are others who suggest that the wells could deplete the basin within 10 years. She suggested that a hydrologist study the basin and the proposal to determine what effect the project will have on water in the basin. Ms. Dodds concluded by requesting that the OSE not accept the application until area stakeholders have a chance to protest it.

Anita Hand, Catron County commissioner, noted that the first application was vague about end users and about uses for the water pumped from the proposed wells and that the second application is similarly vague. She also pointed out that Augustin Plains Ranch had only

had one meeting with residents and did not sufficiently address their concerns. Commissioner Hand said that other problems with the application are that the applicant's theory regarding the rate of aquifer recharge is unproven, that there is an unknown impact on water supplies in Catron and Socorro counties and that there is no known plan for making up water to impaired users in the area.

Michel Jichlinski, project director, Augustin Plains Ranch Water Project, said he believes the proposed project has potential and that the company will try to provide as much information as possible to interested parties. He explained that the new application has been published on the company's web site, and it includes much of the information that was not in the first one. Finally, Mr. Jichlinski acknowledged that the project must pass several tests before it actually begins, including approval of the application, demonstration that the project meets the necessary legal requirements and study of the project's economic viability. He asked that committee members continue to keep an open mind regarding the project.

Questions and comments from the committee included:

- the balance between existing uses and potential beneficial uses;
- the contemplated yield of wells versus needs and the average yield of wells used by some New Mexico well users;
- that seemingly similar projects proposed elsewhere in New Mexico appear to appropriate nonrecurring water sources for recurring uses;
- that the proper forum for questions, such as aquifer recharge rates, is at OSE hearings;
- the depth of test wells in relation to existing wells and the difficulty in determining the effect, and potential impairment, of deep test wells to relatively shallow established wells;
- the original application was deemed withdrawn upon submission of a second application;
- the basin in question has been closed by the OSE;
- once a basin is closed, the burden falls upon the applicant to prove that no impairment to existing users will occur;
- the role of the legislature in influencing water policy;
- the time elapsed between applications and the questions that continue to be raised regarding both applications;
- the legal subtleties regarding impairment of water rights;
- the time frame for putting water rights to beneficial use; and
- that the application is uncommon but not without precedent.

New Mexico Rural Water Association Issues

Bill Conner, executive director of the New Mexico Rural Water Association (NMRWA), briefed the committee on the background, mission, membership, governance and activities of the association. He began with some background on the NMRWA, explaining that it represents 488 community water systems serving about 1.3 million customers in New Mexico, and it is

governed by a board of directors elected from system membership. Mr. Conner also discussed some of the work of the NMRWA, noting that it helps with water and wastewater system development, as well as emergency assistance to communities and source water protection plans for community systems. He also said that the NMRWA helps with solid waste management and energy-efficiency assessments. Mr. Conner also discussed operator and board member training offered by the NMRWA, as well as public education and outreach efforts.

Questions and comments from the committee included:

- that the water projects the state prioritizes and the needs of small, rural communities may not be aligned;
- that New Mexico is not deficient in funding water projects, but it does have problems getting money to those who need it;
- audit issues for small water systems;
- that membership fees help fund operations of water associations, but they do not generate enough income to carry them;
- the procedures for addressing dry or contaminated wells;
- that most associations try to have various funding sources complement one another;
- that regionalization of water systems can happen at several different service levels, such as sharing bookkeeping services with neighboring systems;
- that water systems need to become more sustainable; and
- that some water systems come in and out of associations.

Report on New Mexico Recycling — House Memorial 51 (2014)

English Bird, executive director, New Mexico Recycling Coalition (NMRC), began by explaining that House Memorial 51 (2014) requested that strategies be developed to attain the state recycling goal of 50 percent, as outlined by the Solid Waste Act. She noted that the state is currently at a 15.7 percent recycling rate. Ms. Bird pointed out that a link exists between increased recycling and the creation of jobs, citing estimates of more than 3,500 additional jobs that could be directly related to recycling at a 50 percent rate.

Ms. Bird also discussed current recycling capacity, noting that while there are 22 regionalized recycling hubs, traditional recyclables only represent a portion of all recyclable materials.

Ms. Bird went on to discuss recommendations for attaining a 50 percent recycling rate, which centered on a handful of questions, including:

- what resources the Department of Environment (NMED) would need to accomplish such a goal;
- funding mechanisms to support a 50 percent recycling rate;
- short-term policy recommendations; and
- long-term policy recommendations.

Ms. Bird went on to provide the committee with the following recommendations:

- convene four stakeholder groups to study funding, commercial recycling, state agency recycling and construction and demolition recycling;
- the NMRC and NMED will work together to host stakeholder group meetings and consolidate results;
- expect a multi-year process as evidenced by similar efforts in other states; and
- ensure proper staffing to conduct stakeholder meetings, including creation of at least one new NMED position.

Questions and comments from the committee included the following:

- there are examples of public/private partnerships working well to address recycling issues;
- regionalized "hub-and-spoke" recycling models seem to work well in more urbanized states;
- the importance of education and outreach;
- simply expanding landfills costs a minimum of \$1 million;
- the NMED is not currently seeking additional funding or positions for recycling;
- the diversion of organic material, such as recycling yard waste as mulch;
- the measurement of recycling rates;
- Silver City and San Juan County have adopted "pay-as-you-go" recycling models;
- low-value materials, such as glass and plastic, and the relatively high cost of transporting them to be recycled;
- the NMRC worked with the Eight Northern Indian Pueblos Council on recycling issues; and
- the value of public service announcements regarding recycling.

Nuestro Rio — Regional Water Initiatives

Robert Apodaca of the Motiva Corporation provided the committee with a presentation regarding the Nuestro Rio initiative. He explained that Nuestro Rio is a network of more than 30,000 Latinos based in western states whose mission is to educate communities about the history of Latinos and their relationship with rivers and water in the West in order to advocate for healthy rivers in the West for generations to come. Mr. Apodaca began by discussing the status of the Colorado River, pointing out its importance as a water supply for most southwestern states while acknowledging that its supply continues to decrease as demand increases. Mr. Apodaca went on to discuss a Nuestro Rio youth initiative, which included a Colorado River raft trip for students of the Nuestro Rio Youth Leadership Program to help educate them on both the river's importance and the challenges surrounding it. He also discussed the Nuestro Rio Regional Water Caucus, which convened local Latino leaders from New Mexico, Arizona, Colorado, Nevada and California, to discuss and find regional solutions to water issues.

Questions and comments from the committee included the following:

- the youth group opposes any diversion project on the Gila River;
- there have been some discussions about tying in the Nuestro Rio youth initiative with acequias; and
- youth group members were selected from applicants who wrote essays about the importance of rivers and conducted short phone interviews.

Water Supply Vulnerabilities Study

David Gutzler, Department of Earth and Planetary Sciences, University of New Mexico (UNM), began by explaining that several researchers worked together to determine the short- and long-term vulnerabilities of water supply in New Mexico, particularly the lower Rio Grande. He began by providing the committee with a comparison of two droughts that affected the region, one occurring in the 1950s and the other between 2008 and 2013. He provided comparisons regarding precipitation, reservoir outflow, reservoir storage and temperatures. Mr. Gutzler also discussed weather projections and streamflow forecast analyses.

Peggy Johnson, New Mexico Bureau of Geology and Mineral Resources, New Mexico Institute of Mining and Technology, discussed ground water vulnerabilities during the most recent drought. She began by discussing the complex relationship between surface water and ground water recharge and discharge and changes in aquifer storage. Ms. Johnson pointed out that aquifer recharge occurs when precipitation is greater than evaporation and withdrawals from the aquifer, explaining that while ground water has provided a stable water reserve during short-term droughts, warming temperatures will affect the balance of aquifer recharge and change the distribution of ground water recharge and availability, as warming temperatures may trigger a cascade of negative impacts on ground water.

Janie Chermak, Department of Economics, UNM, provided the committee with an overview of changes in agriculture in New Mexico since the 1950s, comparing data from the 1950s drought to current data. She provided the committee with data for the state and data specific to Dona Ana County. Ms. Chermak noted changes in farm size, pointing out that the percentage of small farms in the state (10 acres or less) has grown from just over 20 percent in 1954 to over 60 percent in 2007. She also noted that the number of operations with animals has dropped significantly since 1954. Ms. Chermak concluded that while agriculture today is significantly different from the 1950s, crop changes and farm size changes have a significant impact on management choices. For example, she said that while cotton was the preferred crop in Dona Ana County in the 1950s, most farmers there now grow pecans or tree fruits. Ms. Chermak suggested that management choices in times of drought are difficult with pecan trees, as losing a tree means a loss of capital investment.

Dr. Lee Reynis, Bureau of Business and Economic Research, UNM, also discussed New Mexico agriculture from the 1950s to the present. She explained that farm income as a percentage of total income in New Mexico has declined steadily since the early 1900s and now

accounts for less than five percent of New Mexico's total income. Dr. Reynis noted that agricultural production has also declined since the 1950s. She went on to discuss private sector wage and salary employment, both in New Mexico and in Las Cruces, pointing out that as the agricultural work force has shrunk, the non-agricultural labor force has grown significantly.

Questions and comments from the committee included the following:

- agriculture accounts for about 80 percent of the water used by the state and about 90 percent of the water used in Dona Ana County;
- some agricultural job losses are because of automation and mechanization;
- aquifer mapping efforts;
- the difference between diversions of water versus consumptive water use in calculating water use statistics;
- agriculture cannot be considered an old or new economy;
- the effect of trade agreements with China on American agriculture;
- much of the supply vulnerabilities study has focused on Dona Ana County and southern New Mexico, but further study on the middle Rio Grande is planned;
- the legislature appropriated \$100,000 for the study;
- future El Nino weather patterns are impossible to predict;
- the growth of the non-agricultural work force in Dona Ana County;
- farmers have adapted their techniques in response to conditions such as pivot irrigation and growing different crops; and
- the amount of water going to aquifer and irrigation recharge.

Tom Blaine, newly appointed state engineer, was introduced to the committee.

Extreme Precipitation Modeling Update/Opportunities

Charles Thompson, chief, Dam Safety Bureau, OSE, provided the committee with background on the safety of publicly owned dams in New Mexico. He explained that dams that have the potential to cause loss of life should they fail are required to have a spillway that can safely pass floodwater resulting from the probable maximum precipitation. Mr. Thompson explained the methodology used to determine probable maximum precipitation, noting that 40 years of rainfall data are required for modeling. He explained that compilation of that data relied on outdated data collection methods, and while more than 70 publicly owned dams have been identified as high hazard and requiring a spillway, updated data collection should identify some dams that have been incorrectly characterized. Mr. Thompson recommended that the probable maximum precipitation estimation methodology be updated by developing a geographic information system (GIS) tool for New Mexico.

Charles Easterling, New Mexico Watershed and Dam Owners Coalition, explained that some dams classified as high hazards are incorrectly classified. For example, he noted that there is insufficient atmosphere at Morphy Lake's altitude to generate the 17-plus inches of rain to cause the dam there to fail. He also said that developing a GIS tool for New Mexico would

require state sponsorship and a little bit of funding but that it would help classify dams correctly.

Questions and comments from the committee included the following:

- the federal agency takeovers of dams in southeastern New Mexico;
- the United States Army Corps of Engineers is providing peer review support; and
- the United States Army Corps of Engineers is developing some state-specific project management plans.

Statewide Elevation Data Acquisition Proposal

Gar Clarke, New Mexico geospatial program manager, Department of Information Technology, and Michael Inglis, associate director, Earth Data Analysis Center, UNM, explained that key geospatial data needs can be met with high-quality, high-resolution elevation data, but much of the existing data are outdated and at low resolution. Mr. Clarke and Mr. Inglis explained that lidar, which measures distances to the earth using laser pulses from aircraft, can provide the necessary data. They provided the committee with examples of the current data and lidar maps of the same patch of land. Mr. Clarke and Mr. Inglis said that the New Mexico Elevation Data Planning and Acquisition Subcommittee is responding to a national effort to collect high-quality topographic data. They said that a proposal is being developed and that some funding will be necessary.

Questions and comments by the committee included the following:

- data collection is a one-time event to create a baseline; updated data will require additional data collection efforts;
- the ability of state and federal agencies to view and manipulate data;
- free mapping services, such as Google Earth, are not as accurate and likely not as helpful to land managers;
- coordination with other government agencies on use of the data;
- some ground truthing will have to take place on private land;
- cleanup of ground truthing work on private land;
- funding will likely come from a combination of state money and federal grants;
- a state fiscal agent will be required, possibly the Department of Information Technology; and
- data should be available to tribes and the public.

Wednesday, December 3

On a motion made, seconded and passed, the minutes of the October 6-7, 2014 meeting of the committee were approved as submitted.

Mid-Rio Grande Levee Task Force

Subhas Shah, Middle Rio Grande Conservancy District (MRGCD), provided the

committee with an overview of the work of the Mid-Rio Grande Levee Task Force. He explained that the task force is continuing its work in evaluating and planning for reconstruction of levees along middle Rio Grande. Mr. Shah went on to discuss levee-related activities in five middle Rio Grande regions: San Acacia, Bernalillo to Belen, Albuquerque, the Town of Bernalillo and the Montaño area. He provided an overview of the status of levee reconstruction projects, cost-sharing agreements for various projects, plans for future construction projects and various studies.

Amy Haas, general counsel and acting director, Interstate Stream Commission (ISC), explained that the ISC is the non-federal cost-sharing entity for the San Acacia levee project. She explained that the ISC is interested in helping with agriculture and erosion control and that the project will also help with water compact delivery obligations.

Jerry Nieto, United States Army Corps of Engineers, explained that the United States Army Corps of Engineers has been working with the MRGCD and the ISC for several years on the San Acacia levee project. He said that while there are still feasibility studies being conducted on some parts of the project, it is still a huge project for the Socorro area and will bring more than 50 jobs to the area over the next few years.

Questions and comments from the committee included:

- that the concerns of Bernalillo residents regarding flood plain classifications and the likelihood that the project will help many residents; and
- that the identification of local government matching funds is one of the biggest challenges facing the levee projects.

Proposed Legislation

Forest and Watershed Restoration Funding

Kent Reid, director, New Mexico Forest and Watershed Restoration Institute, presented the committee with a proposed bill that would create a forest and watershed restoration board, coordinate watershed restoration efforts statewide and use existing insurance premium taxes to fund watershed treatment and thinning of New Mexico forests to help mitigate the threat of catastrophic wildfire.

On a motion made, seconded and passed, the committee endorsed the bill, with Senator Griego voting NO.

During the presentation of the second proposed bill, members of the committee questioned the presence of a quorum. The chair, upon establishing that a quorum was not present, explained to presenters that the committee could not endorse any bills unless a quorum was reestablished. He agreed to hear the following presentations:

- administrative water hearing locations;
- mutual domestic water consumer association governance;
- Mining Safety Board emergency notification changes;
- New Mexico fruits and vegetables for school meals appropriation;
- Interstate Wildlife Compact;
- Interstate Mining Compact;
- trespass/public access to
- streambeds;
- private boat docks on Ute Reservoir; and
- changing the definition of "livestock".

There being no further business, the committee adjourned at 12:15 p.m.